

Aircraft Manufacturer General Dynamics

Aircraft Engine Manufacturer General Electric (F110-GE-100)

No. of Engines 1 Engine Rating 28,000 lb

Min. T/O Wt. 19.1 k-lb * Min. T/O Dist. @ Min. T/O Wt. 700 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 4,400 ft

Max. T/O Wt. Peace-Time 35.6 k-lb Max. T/O Wt. War-Time 37.5 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 2,200 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 10,000 ft

Min. Ldg. Wt. 19.7 k-lb Max. Ldg. Wt. 37.5 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 2,350 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 5,600 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra	High A	Medium B	Low C	Very
				Low D				Low D
20	7	7	7	7	7	7	7	7
36	15	15	15	15	14	14	13	13
38	16	16	16	16	15	15	14	14

Figure A-142. F-16D, Fighting Falcon

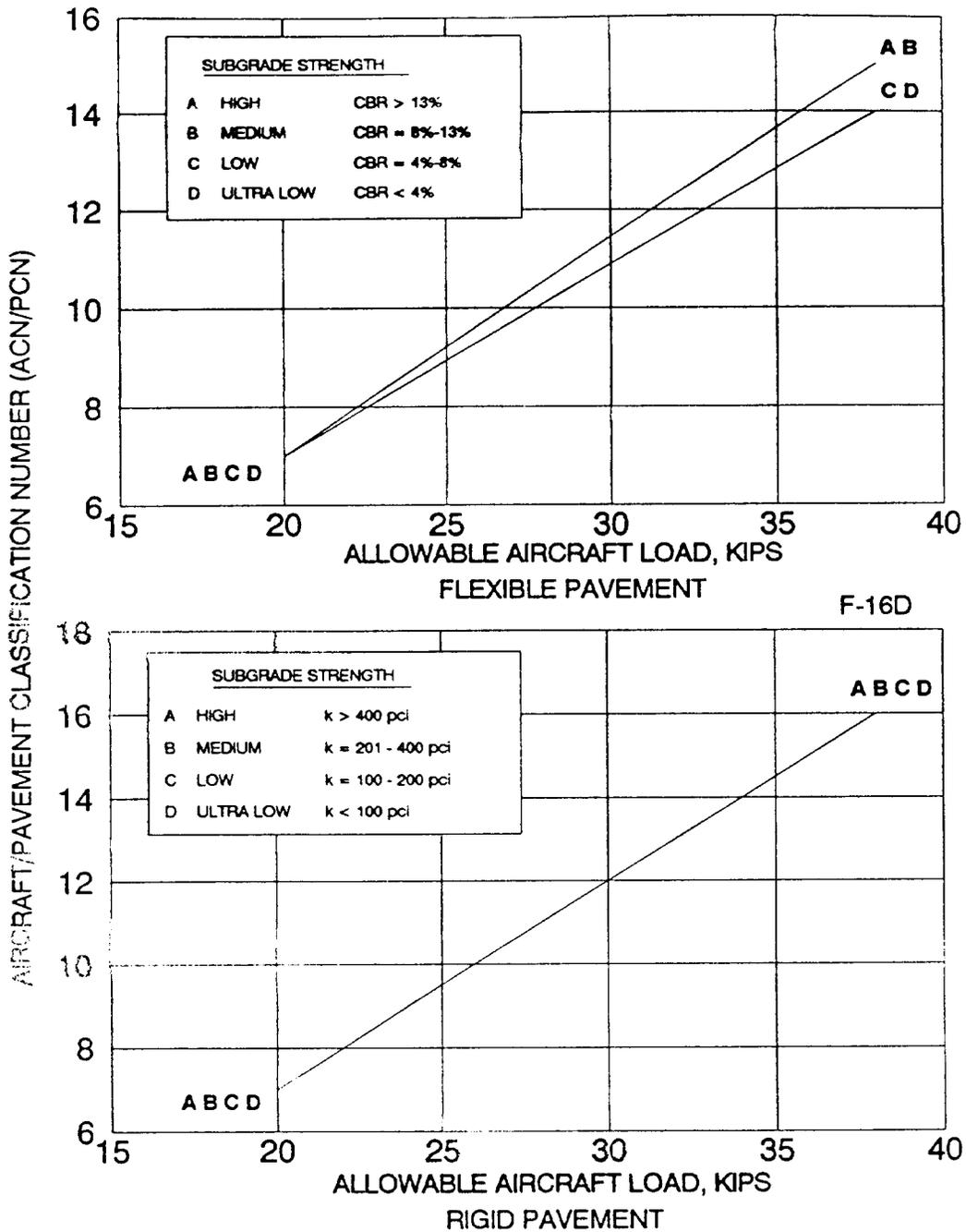


Figure A-143. F-16D, ACN/PCN Curves

Aircraft Manufacturer North American

Aircraft Engine Manufacturer Pratt and Whitney (J57-P-7)

No. of Engines 1 Engine Rating 13,000 lb

Min. T/O Wt. 23.8 k-lb * Min. T/O Dist. @ Min. T/O Wt. 3,900 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 7,900 ft

Max. T/O Wt. Peace-Time 41.5 k-lb Max. T/O Wt. War-Time 41.5 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 10,200 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 16,000 ft

Min. Ldg. Wt. 23.0 k-lb Max. Ldg. Wt. 41.5 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 3,800 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 5,800 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High	Medium	Low	Ultra	High	Medium	Low	Very
	A	B	C	Low D	A	B	C	D
23	9	9	9	9	9	9	9	9
42	20	20	20	19	19	18	18	17

Figure A-144. F-100, Super Sabre

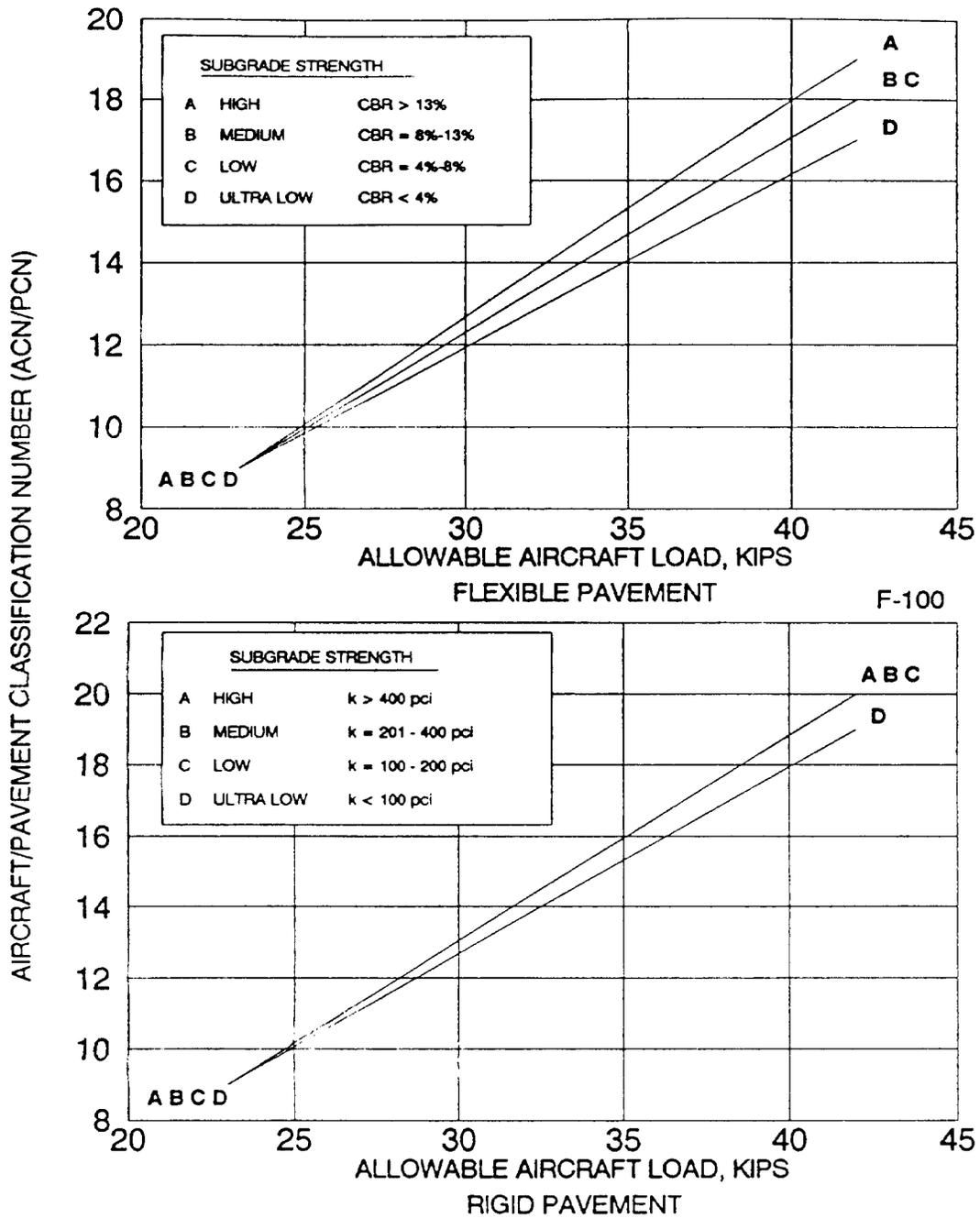


Figure A-145. F-100, ACN/PCN Curves

Aircraft Manufacturer McDonnell Douglas

Aircraft Engine Manufacturer Pratt and Whitney (J57-P-55)

No. of Engines 2 Engine Rating 16,900 lb

Min. T/O Wt. 35.0 k-lb * Min. T/O Dist. @ Min. T/O Wt. 1,800 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 52.4 k-lb Max. T/O Wt. War-Time 52.4 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 3,500 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 33.6 k-lb Max. Ldg. Wt. 35.5 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 4,000 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 4,200 ft (Estimated)

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Very Low D
34	17	17	16	16	14	14	14	14
36	17	17	17	17	15	15	15	15
52	26	26	25	25	24	23	22	22

Figure A-146. F-101B, Voodoo

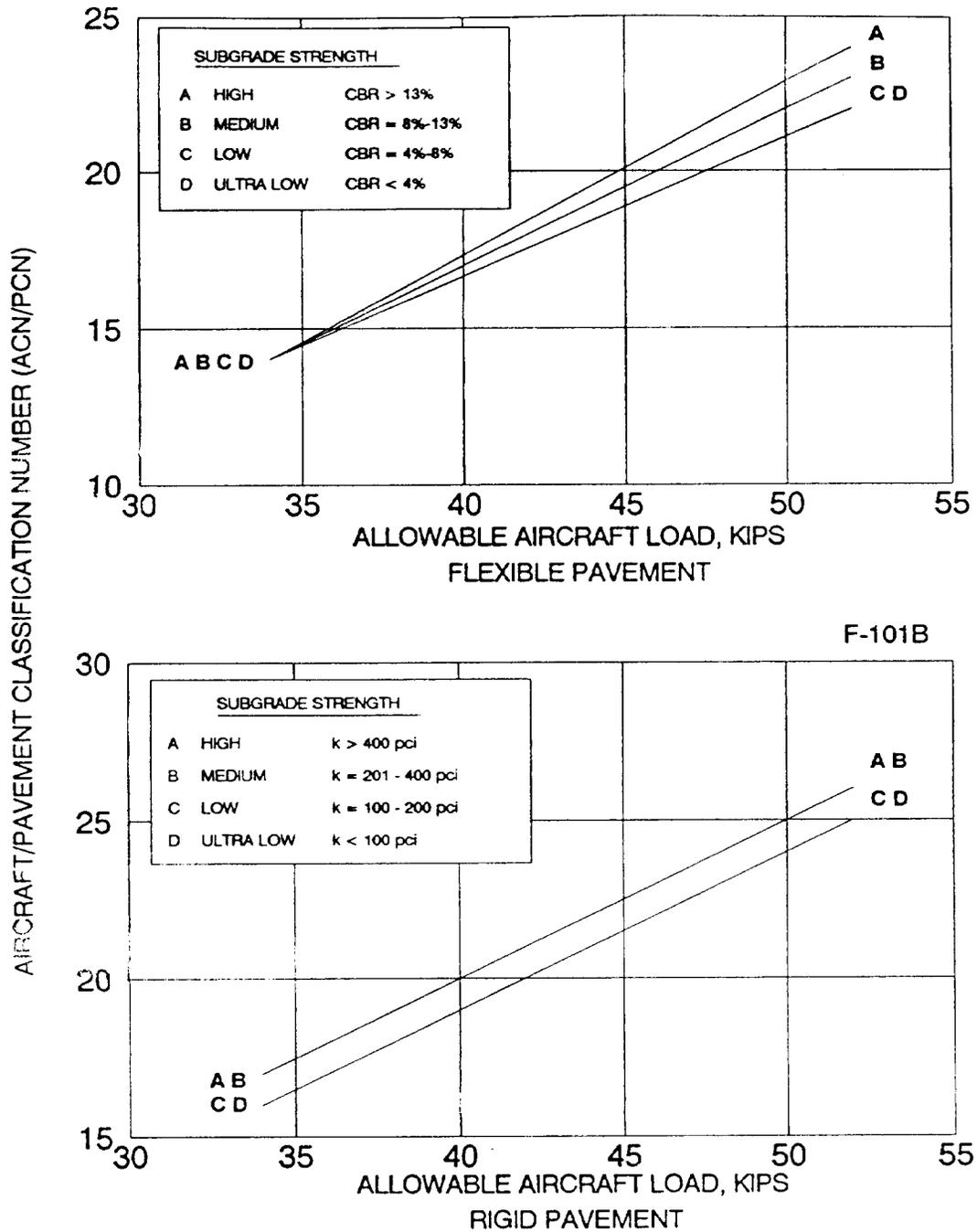


Figure A-147. F-101B, ACN/PCN Curves

Aircraft Manufacturer Lockheed

Aircraft Engine Manufacturer General Electric (J79-GE-11A)

No. of Engines 1 Engine Rating 15,600 lb

Min. T/O Wt. 18.2 k-lb * Min. T/O Dist. @ Min. T/O Wt. 2,000 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 29.0 k-lb Max. T/O Wt. War-Time 29.0 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 5,300 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 16.9 k-lb Max. Ldg. Wt. 17.2 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 2,400 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. †

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High	Medium	Low	Ultra	High	Medium	Low	Very
	A	B	C	D	A	B	C	D
17	7	7	7	8	8	8	7	7
29	12	12	12	13	13	12	12	12

Figure A-148. F-104G, Starfighter

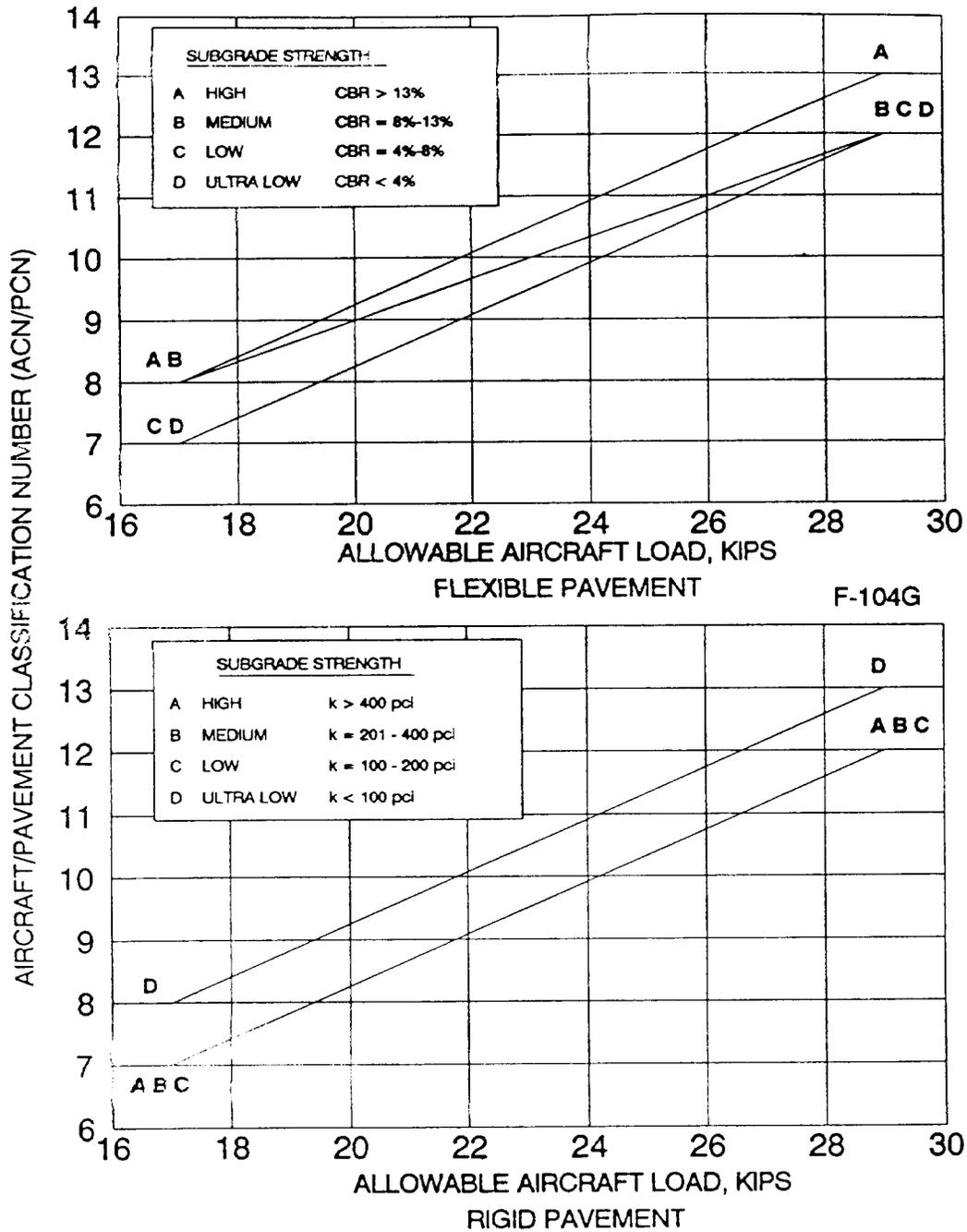


Figure A-149. F-104G, ACN/PCN Curves

Aircraft Manufacturer Fairchild

Aircraft Engine Manufacturer Pratt and Whitney (J75-P-19W)

No. of Engines 1 Engine Rating 26,500 lb

Min. T/O Wt. 37.8 k-lb * Min. T/O Dist. @ Min. T/O Wt. 2,500 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 54.6 k-lb Max. T/O Wt. War-Time 54.6 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 6,260 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 35.3 k-lb Max. Ldg. Wt. 51.7 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 2,760 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. †

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Very Low D
35	14	14	14	15	13	14	14	14
52	21	21	21	23	22	22	22	22
55	22	22	23	24	24	23	23	23

Figure A-150. F-105G, Thunderchief

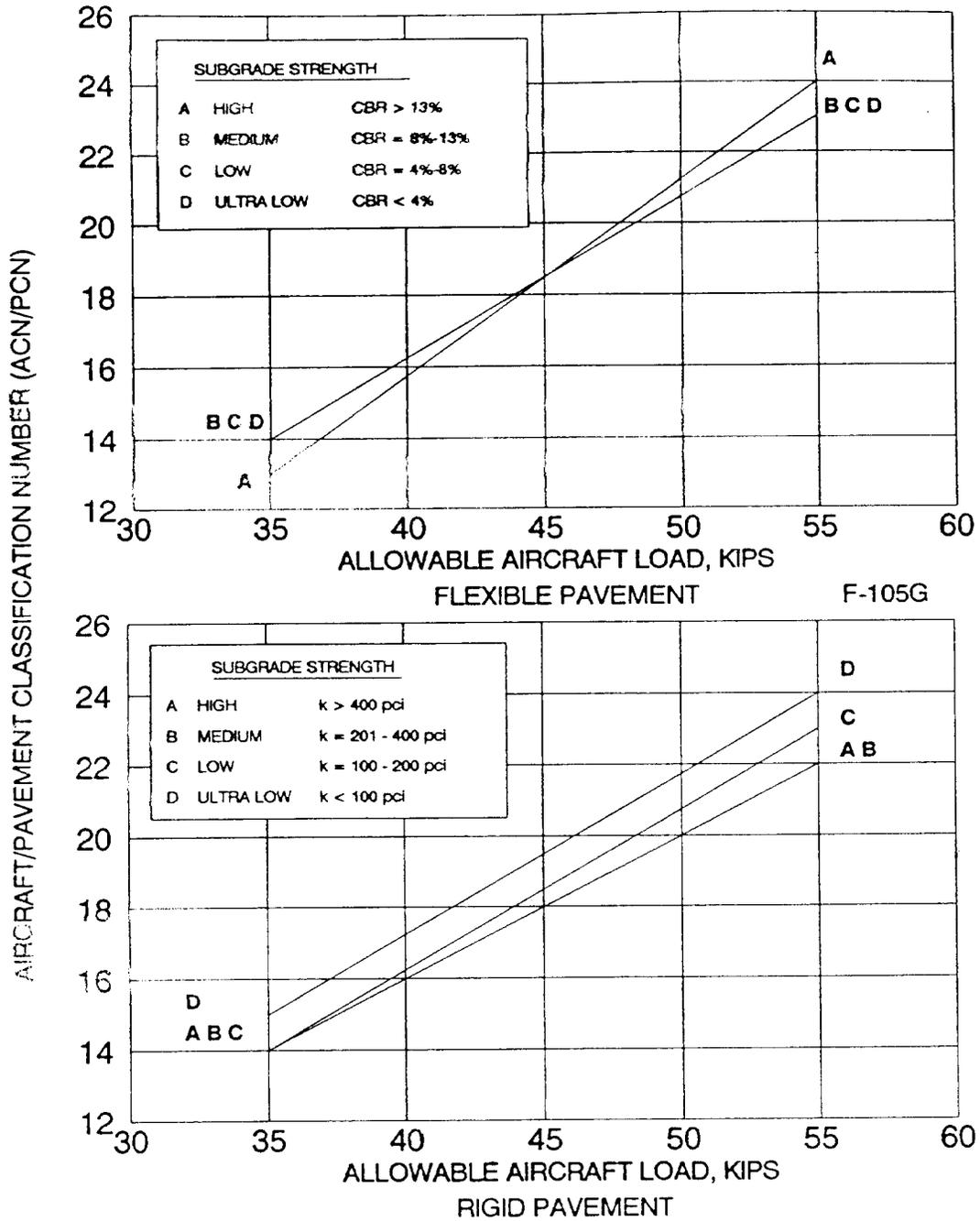


Figure A-151. F-105G, AGN/PCN Curves

Aircraft Manufacturer General Dynamics/Convair

Aircraft Engine Manufacturer Pratt and Whitney (J75-P-17)

No. of Engines 1 Engine Rating 24,500 lb

Min. T/O Wt. 26.0 k-lb * Min. T/O Dist. @ Min. T/O Wt. 3,500 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 8,500 ft

Max. T/O Wt. Peace-Time 41.0 k-lb Max. T/O Wt. War-Time 42.5 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 6,200 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 9,600 ft

Min. Ldg. Wt. 26.0 k-lb Max. Ldg. Wt. 42.5 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 5,200 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 9,300 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High	Medium	Low	Ultra	High	Medium	Low	Very
	A	B	C	Low D	A	B	C	Low D
26	11	11	11	11	11	10	10	10
41	20	20	19	19	19	17	17	16
43	21	21	20	20	20	18	18	17

Figure A-152. F-106A/B, Delta Dart

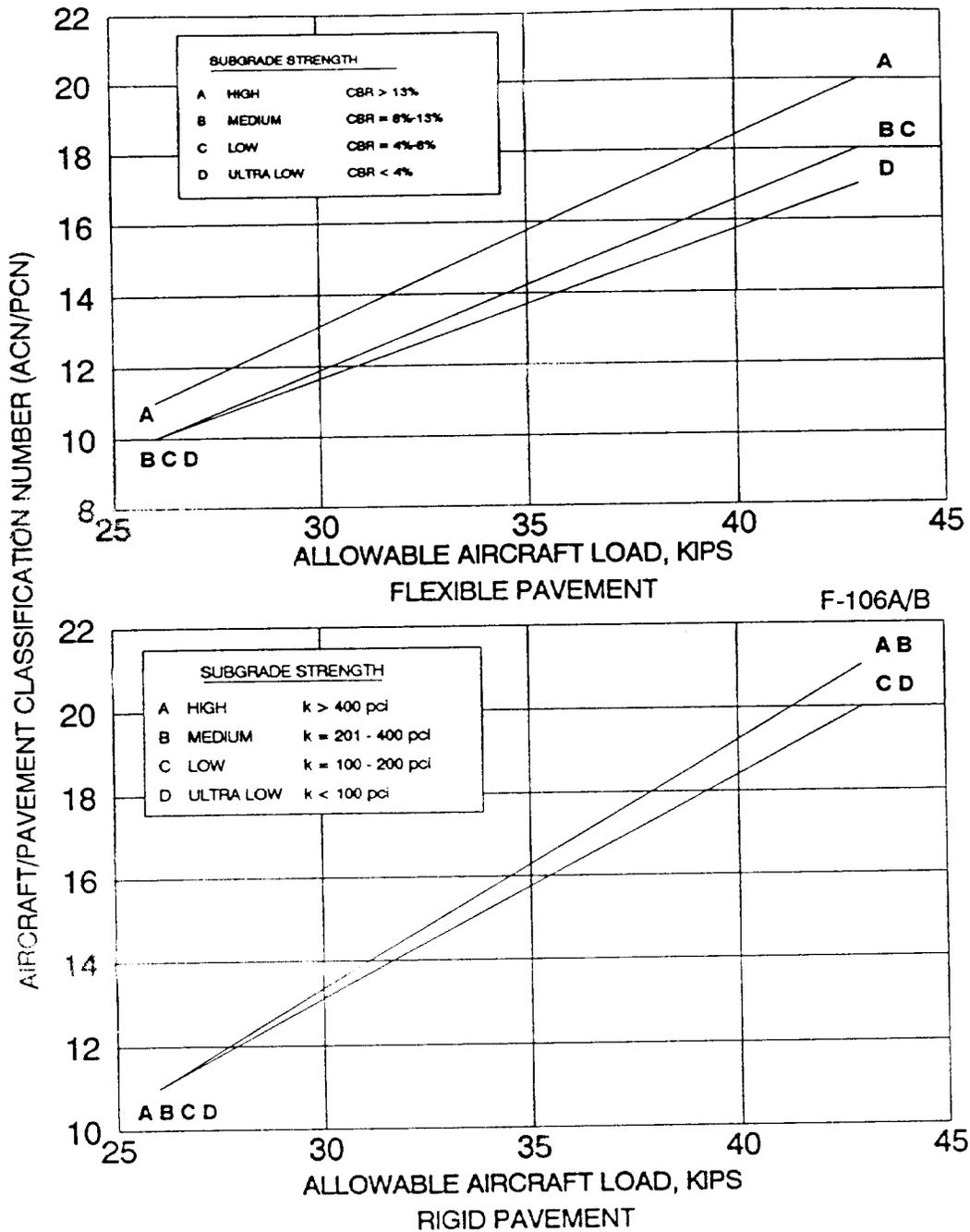


Figure A-153. F-106A/B, ACN/PCN Curves

Aircraft Manufacturer General Dynamics

Aircraft Engine Manufacturer Pratt and Whitney (TF30-P-3)

No. of Engines 2 Engine Rating 18,500 lb

Min. T/O Wt. 59.6 k-lb * Min. T/O Dist. @ Min. T/O Wt. 1,300 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 3,700 ft

Max. T/O Wt. Peace-Time 91.3 k-lb Max. T/O Wt. War-Time 98.9 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 5,400 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 13,500 ft

Min. Ldg. Wt. 51.6 k-lb Max. Ldg. Wt. 72.0 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 1,480 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 6,200 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	<u>Rigid Pavement Subgrades</u>				<u>Flexible Pavement Subgrades</u>			
	High	Medium	Low	Ultra	High	Medium	Low	Very
	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
52	17	17	18	18	19	21	23	24
72	29	29	29	29	31	32	33	34
91	40	40	40	39	43	42	43	43
99	44	44	44	43	47	46	47	47

Figure A-154. F-111A/E

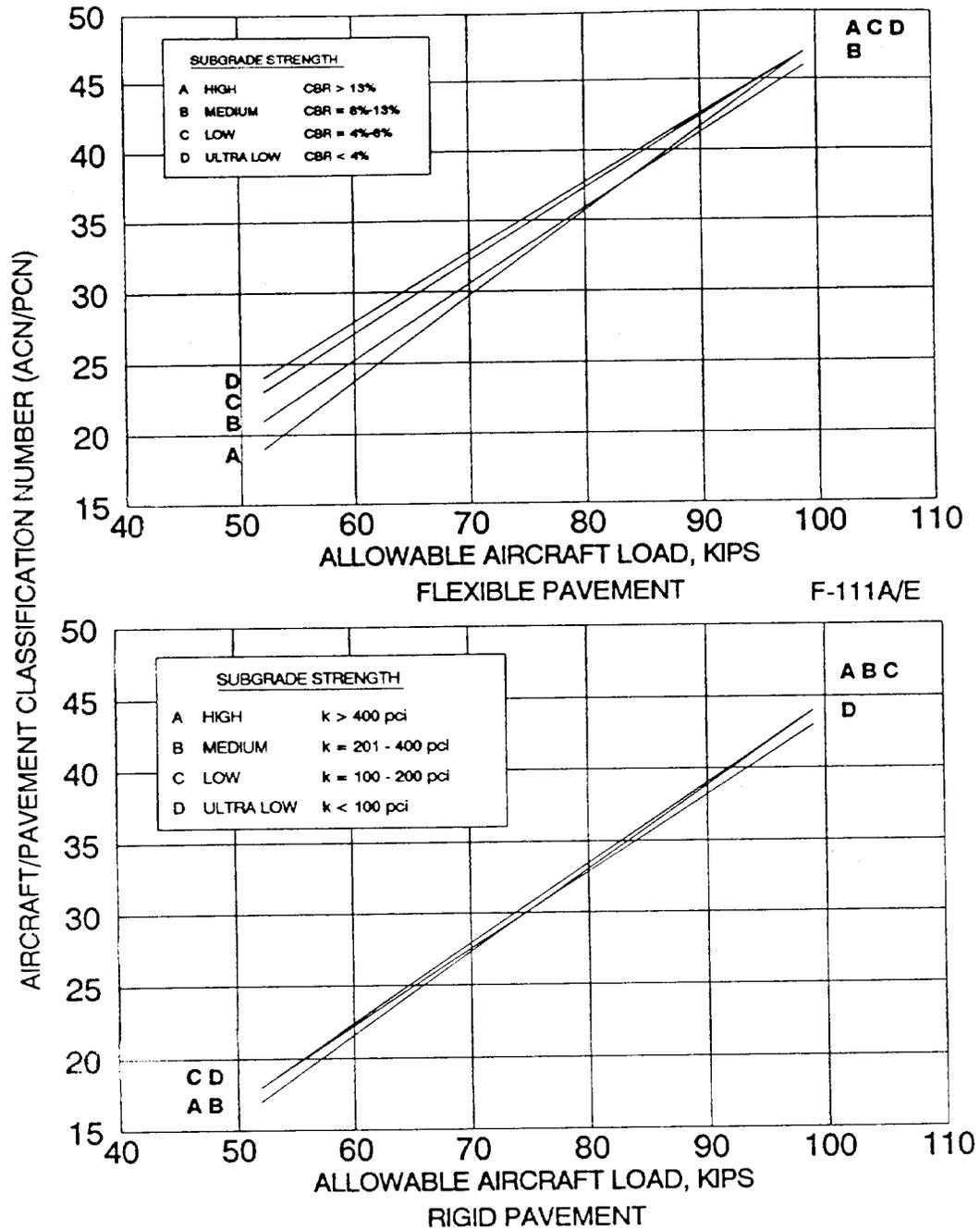


Figure A-155. F-111A/E, ACN/PCN Curves

Aircraft Manufacturer General Dynamics

Aircraft Engine Manufacturer Pratt and Whitney (TF30-P-9)

No. of Engines 2 Engine Rating 20,840 lb

Min. T/O Wt. 53.7 k-lb * Min. T/O Dist. @ Min. T/O Wt. 1,000 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 3,700 ft

Max. T/O Wt. Peace-Time 97.5 k-lb Max. T/O Wt. War-Time 100.0 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 4,500 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 13,500 ft

Min. Ldg. Wt. 52.9 k-lb Max. Ldg. Wt. 82.5 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 1,500 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 6,500 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

Weight	ACN							
	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Very Low D
53	17	18	19	19	20	22	23	24
83	35	35	35	35	38	38	38	39
98	44	44	44	43	47	46	46	46
100	45	45	45	44	48	47	47	47

Figure A-156. F-111D

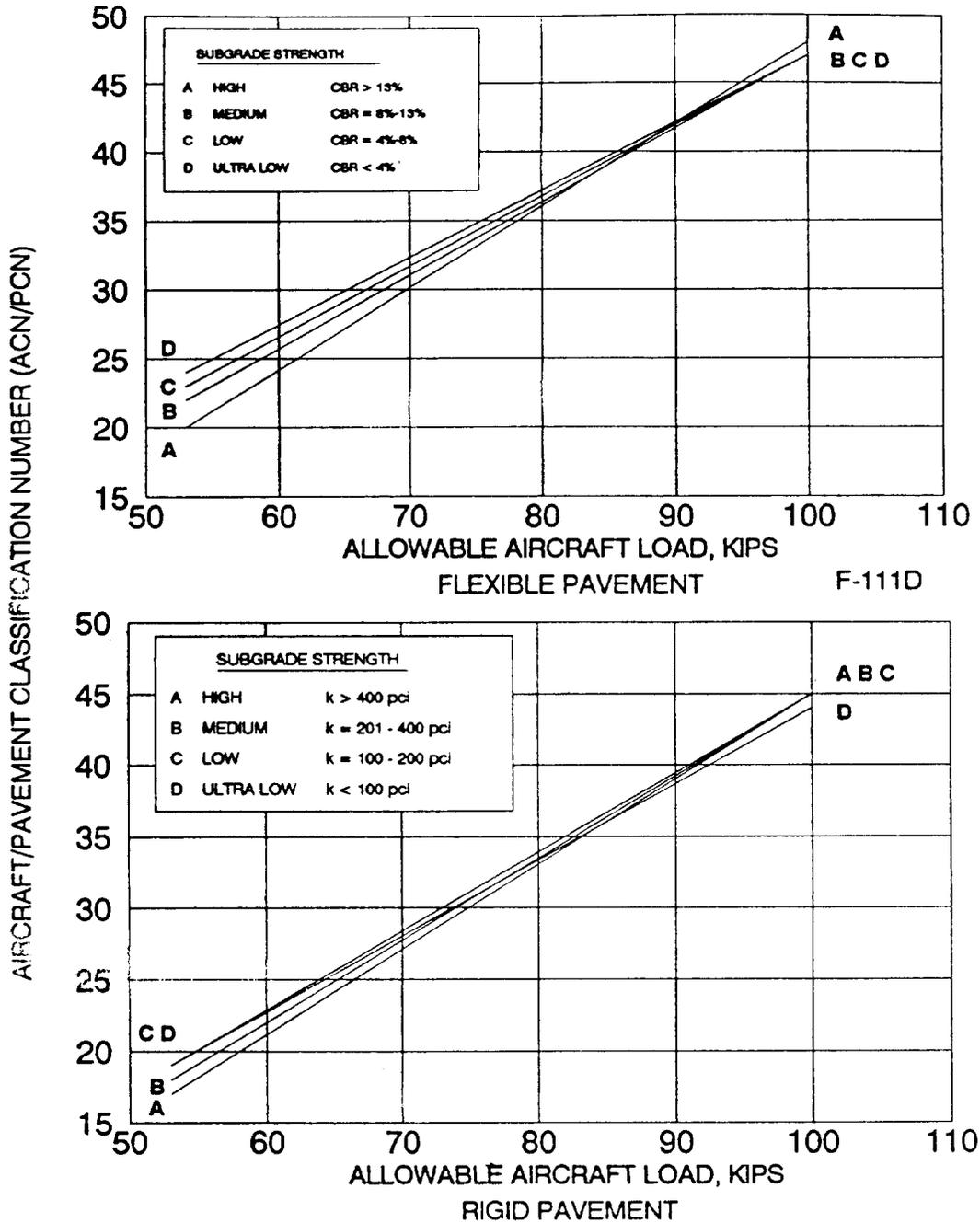


Figure A-157. F-111D, ACN/PCN Curves

Aircraft Manufacturer General Dynamics

Aircraft Engine Manufacturer Pratt and Whitney (TF30-P-100)

No. of Engines 2 Engine Rating 25,100 lb

Min. T/O Wt. 62.4 k-lb * Min. T/O Dist. @ Min. T/O Wt. 1,300 ft

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 4,200 ft

Max. T/O Wt. Peace-Time 97.0 k-lb Max. T/O Wt. War-Time 100.0 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 3,900 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 11,700 ft

Min. Ldg. Wt. 54.9 k-lb Max. Ldg. Wt. 82.5 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 1,600 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 6,500 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High	Medium	Low	Ultra	High	Medium	Low	Very
	A	B	C	D	A	B	C	D
55	18	19	19	19	21	23	24	25
83	35	35	35	35	38	38	38	39
97	43	43	43	42	46	45	45	46
100	45	45	45	44	48	47	47	47

Figure A-158. F-111F

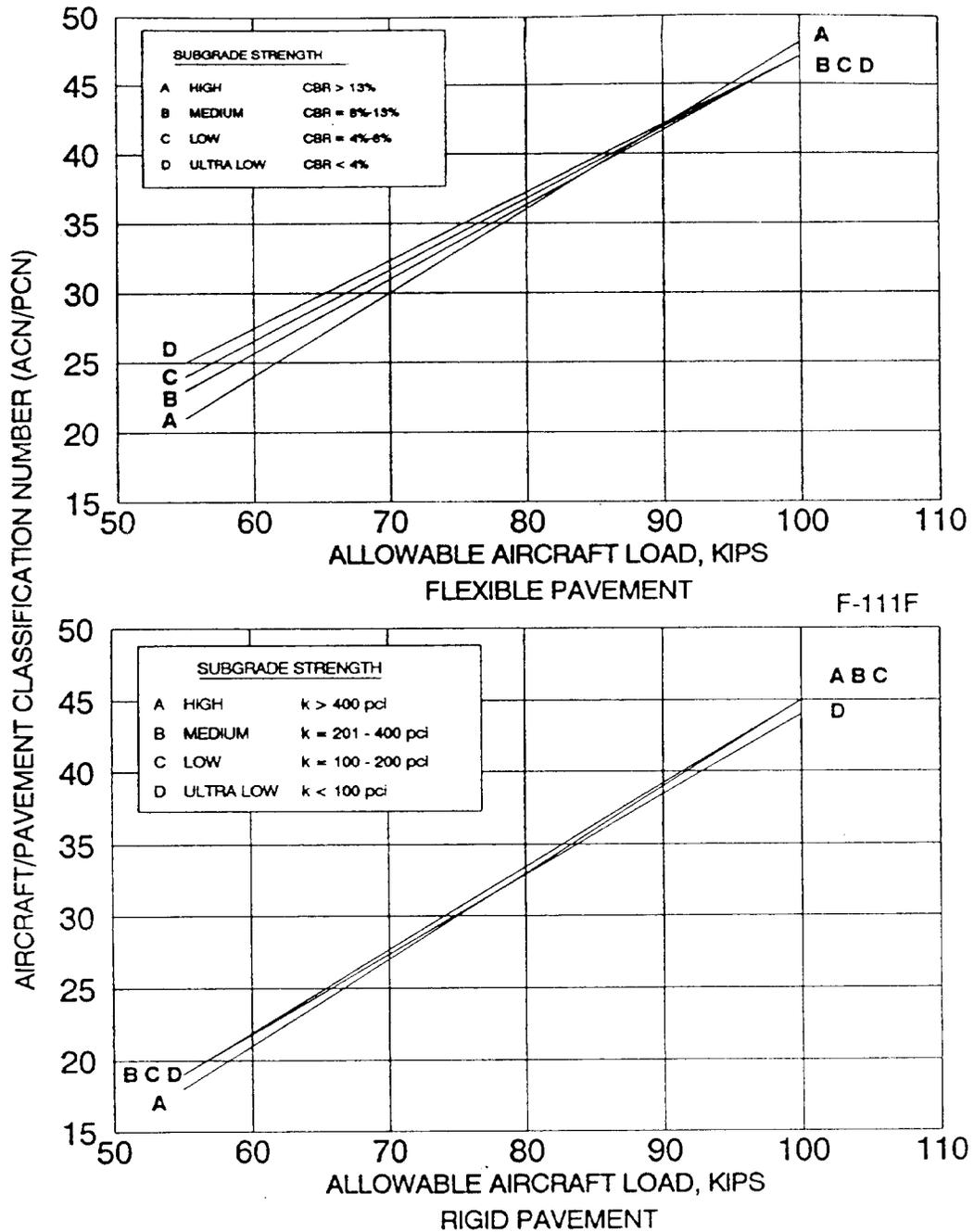


Figure A-159. F-111F, ACN/PCN Curves

Aircraft Manufacturer Bellanca (formerly manufactured by Champion)

Aircraft Engine Manufacturer Lycoming (O-320-A2D)

No. of Engines 1 Engine Rating 150 HP

Min. T/O Wt. 1.38 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 1.65 k-lb Max. T/O Wt. War-Time 1.65 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 380 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 1.38 k-lb Max. Ldg. Wt. 1.65 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. 400 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Very Low D

1,650 lb/24 psi**

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-160. Bellanca 7, Citabria

Aircraft Manufacturer Cessna Aircraft Co.

Aircraft Engine Manufacturer Continental (C85-12)

No. of Engines 1 Engine Rating 85 HP

Min. T/O Wt. 1.02 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 1.45 k-lb Max. T/O Wt. War-Time 1.45 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time †

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 1.02 k-lb Max. Ldg. Wt. 1.45 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. †

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	<u>Rigid Pavement Subgrades</u>				<u>Flexible Pavement Subgrades</u>			
	High	Medium	Low	Ultra	High	Medium	Low	Very
	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>

1,450 lb/†**

** The relative structural effect of an aircraft with a weight less than 12,500 pounds is reported as maximum aircraft weight and maximum tire pressure.

Figure A-161. Cessna 120/140